

AMENDMENTS TO THE CLAIMS

Claims 1-14 (canceled)

15. (Currently amended) A robotic, modular road repair machine comprising:
a movable vehicle having at least one slot defined by predetermined dimensions designed to receive a work module;
at least ~~one~~ two work modules each module having predetermined dimensions adapted to fit within each said slot, wherein a first of said work modules is capable of being removed from one of said at least one slots and being replaced by a second of said at least two work modules;
means for robotically moving said at least one of said work modules module between a working position and an inoperative position; and
means for controlling said means for robotically moving and for controlling actuation of said at least one work module.

16. (Previously presented) The road repair machine of claim 15, further comprising a plurality of said slots and a plurality of said work modules, wherein each said slot has the same predetermined dimensions and each said work module has substantially the same predetermined dimensions.

17. (Previously presented) The road repair machine of claim 16, wherein said work modules may be interchanged among various slots, and wherein said means for controlling keeps track of positions of said respective work modules for controlling said actuation of said work modules and said movement of said work modules between working and inoperative positions.

18. (Previously presented) The road repair machine of claim 16, wherein at least two of said work modules have different functions, said work modules being selected from the group consisting of: radar/seismic module, sawing module, drilling module, asphalt filling module, level sensing module, sweeping module, tack coat module, concrete filling module, digging module, grinder module, rolling module, surveying module and crack and joint sealing module.

19. (Previously presented) The road repair machine of claim 15, further comprising a machine engine for driving movement of said machine.

20. (Previously presented) The road repair machine of claim 15, further comprising at least one hopper for containing a road repair material to be delivered to at least one said module for filling defects; and means for conveying the repair material from said at least one hopper to said at least one module.

21. (Previously presented) The road repair machine of claim 20, wherein said at least one hopper is modular and may be interchanged among various locations in said machine.

22. (Previously presented) The road repair machine of claim 15, further comprising a liquid storage tank for supplying liquid to at least one said module; and means for transporting said liquid between said liquid storage tank and said at least one module.

23. (Previously presented) A system for efficiently repairing road surfaces; said system comprising:

a relatively large machine including a movable vehicle having multiple slots, each defined by predetermined dimensions designed to receive a work module; multiple work modules having predetermined dimensions adapted to fit within each said slot, and wherein at least one of said modules comprises a surveying module; means for robotically moving said work modules between a working position and an inoperative position; and means for controlling said means for robotically moving and for controlling actuation of said work modules; and

a relatively small machine including a movable vehicle having at least one slot defined by predetermined dimensions matching said predetermined dimensions of said slots included in said relatively large machine; wherein said surveying module may be removed from said large machine and placed in said slot of said small machine to conduct surveying operations prior to road repair, and then removed from said small machine and replaced in a slot of said large machine for use during road repair operations.

24. (Previously presented) The system of claim 23, wherein said surveying module is a radar/seismic module.

Claims 25-33. (Canceled) Please cancel claims 25-33 without prejudice to the possibility of

filing one or more continuing applications directed to the subject matter recited therein.

34. (New) The road repair machine of claim 15, wherein at least two of said at least two work modules have different functions.

35. (New) The road repair machine of claim 34, wherein said work modules are selected from the group consisting of: radar/seismic module, sawing module, drilling module, asphalt filling module, level sensing module, sweeping module, tack coat module, concrete filling module, digging module, grinder module, rolling module, surveying module and crack and joint sealing module.

36. (New) A robotic, modular road repair machine comprising:
a movable vehicle having a plurality of slots, each defined by predetermined dimensions designed to receive a work module;
a plurality of work modules having predetermined dimensions adapted to fit within each said slot;
means for robotically moving said work modules between a working position and an inoperative position; and
means for controlling said means for robotically moving and for controlling actuation of said at least one work module.

37. (New) The road repair machine of claim 34, wherein said work modules may be interchanged among various slots, and wherein said means for controlling keeps track of positions of said respective work modules for controlling said actuation of said work modules and said movement of said work modules between working and inoperative positions.

38. (New) The road repair machine of claim 34, wherein at least two of said work modules have different functions, said work modules being selected from the group consisting of: radar/seismic module, sawing module, drilling module, asphalt filling module, level sensing module, sweeping module, tack coat module, concrete filling module, digging module, grinder module, rolling module, surveying module and crack and joint sealing module.

39. (New) A robotic, modular road repair machine comprising:

a movable vehicle having at least one slot defined by predetermined dimensions designed to receive a work module;

at least one work module having predetermined dimensions adapted to fit within each said slot;

means for robotically moving said at least one work module between a working position and an inoperative position;

means for controlling said means for robotically moving and for controlling actuation of said at least one work module;

at least one hopper for containing a road repair material to be delivered to at least one said module for filling defects; and

means for conveying the repair material from said at least one hopper to said at least one module, wherein said at least one hopper is modular and may be interchanged among various locations in said machine.

40. (New) A robotic, modular road repair machine comprising:

a movable vehicle having at least two one slots, each defined by predetermined dimensions designed to receive a work module;

at least one work module having predetermined dimensions adapted to fit within each said slot, wherein said at least one work module may be readily removed from a first of said at least two slots and inserted into a second of said at least two slots;

means for robotically moving said at least one work module between a working position and an inoperative position; and

means for controlling said means for robotically moving and for controlling actuation of said at least one work module.